

1. (Five Times Amended) A device for inducing local bone or cartilage formation, comprising:

a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects, said purified osteogenic protein being not associated with other osteogenic proteins with which it is normally associated *in vivo*;

a matrix that does not comprise a synthetic polymer or demineralized bone;

and

a binding agent selected from the group consisting of mannitol, dextran, cellulose, white petrolatum, and derivatives thereof.

2. (Thrice Amended) The device of claim 1, wherein said osteogenic protein is selected from the group consisting of: OP1, OP2, OP3, BMP2, BMP3, BMP4, BMP5, BMP6, BMP9, BMP10, BMP11, BMP12, BMP15, BMP16, DPP, Vgl, 60A protein, GDF-1, GDF3, GDF5, GDF6, GDF7, GDF8, GDF9, GDF10, GDF11, and variants thereof having conservative amino acid substitutions and substantially similar osteogenic activity.

3. (Thrice Amended) The device of claim 1, wherein said osteogenic protein is selected from the group consisting of OP1, OP2, BMP2, BMP4, BMP5, BMP6, and variants thereof having conservative amino acid substitutions and substantially similar

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osteogenic activity.

Delete claim 10 without prejudice.

Please amend claims 17, 20, 23, 31, 32, and 35 as indicated below.

17. (Twice Amended) A device for inducing local bone or cartilage formation, comprising at least approximately 1.25 mg of purified OP-1 and at least approximately 180 mg of carboxymethylcellulose per 1000mg of collagen matrix, wherein said purified OP-1 is not associated with other osteogenic proteins with which it is normally associated *in vivo*.

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20. (Four Times Amended) A device for inducing local cartilage or bone formation comprising a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects and a carrier, wherein said carrier comprises one part binding agent and 10 or fewer parts (w/w) matrix, and said purified osteogenic protein is not associated with other osteogenic proteins with which it is normally associated *in vivo*.

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23. (Four Times Amended) A device for inducing local bone or cartilage formation comprising a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects and a carrier, wherein

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said carrier comprises 10 or fewer parts (w/w) binding agent and 1 part matrix, and said purified osteogenic protein is not associated with other osteogenic proteins with which it is normally associated *in vivo*.

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31. (Amended) A device for inducing local bone or cartilage formation comprising:

purified OP-1;

collagen matrix; and

carboxymethylcellulose;

wherein said purified OP-1 is not associated with other osteogenic proteins with which it is normally associated *in vivo*.

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32. (Amended) A kit for inducing local bone or cartilage formation using the device of claim 1, the kit comprising:

(a) a receptacle adapted to house the osteogenic protein and the matrix material, and

(b) a receptacle adapted to house the binding agent,

wherein the osteogenic protein and matrix material are provided in the receptacle of part (a), and the binding agent is provided in the receptacle of part (b).

35. (Amended) A kit for inducing local bone or cartilage formation using the device of claim 1, the kit comprising:

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a first receptacle adapted to house the osteogenic protein, the matrix material, and the binding agent,

wherein the osteogenic protein, matrix material and binding agent are provided in said receptacle.

REMARKS

Initially, applicants would like to thank the Examiner for granting a telephonic interview with applicants' undersigned agent on June 27, 2000.

In response to the interview, the final Office Action mailed April 10, 2000 ("Office Action"), the Advisory Action mailed November 9, 2000, applicants file herewith a continued prosecution application, and preliminarily amend the application as set forth above.¹ All of the amendments are highlighted with brackets or underlines in the Appendix of Amended Claims. After the preliminary amendments, claims 1-9, 11-25, 31-33, 35, and 36 are pending.

These amendments are intended to promote clarity and to further define the scope of the invention. They do not introduce any new matter. In addition, none of the amendments raises new issues that require further consideration or search.

¹ These amendments are identical to the amendments proposed in applicants' October 16, 2000 Response to Final Office Action in parent application 08/822,186.